

IEPA Log No.: **C-0444-16**
CoE appl. #: **LRC-2016-00428**

Public Notice Beginning Date: **May 26, 2017**
Public Notice Ending Date: **June 16, 2017**

Section 401 of the Federal Water Pollution Control Act
Amendments of 1972

Section 401 Water Quality Certification to Discharge into Waters of the State

Public Notice/Fact Sheet Issued By:

Illinois Environmental Protection Agency
Bureau of Water
Permit Section
1021 North Grand Avenue East
Post Office Box 19276
Springfield, Illinois 62794-9276
217/782-3362

Name and Address of Discharger: Channahon Township Highway Department – 25461 S. Fryer
Street, Channahon, IL 60410

Discharge Location: Near Minooka in NW 1/4 of Section 6 of Township 34N, Range 9E of the 3rd P.M.
in Will County.

Name of Receiving Water: Tributary to DuPage River

Project Description: Proposed encapsulation of approximately 130 linear feet of roadside stream.

The Illinois Environmental Protection Agency (IEPA) has received an application for a Section 401 water quality certification to discharge into the waters of the state associated with a Section 404 permit application received by the U.S. Army Corps of Engineers. The Public Notice period will begin and end on the dates indicated in the heading of this Public Notice. The last day comments will be received will be on the Public Notice period ending date unless a commenter demonstrating the need for additional time requests an extension to this comment period and the request is granted by the IEPA. Interested persons are invited to submit written comments on the project to the IEPA at the above address. Commenters shall provide their names and addresses along with comments on the certification application. Commenters may include a request for public hearing. The certification and notice number(s) must appear on each comment page.

The attached Fact Sheet provides a description of the project and the antidegradation assessment.

The application, Public Notice/Fact Sheet, comments received, and other documents are available for inspection and may be copied at the IEPA at the address shown above between 9:30 a.m. and 3:30 p.m. Monday through Friday when scheduled by the interested person.

If written comments or requests indicate a significant degree of public interest in the certification application, the IEPA may, at its discretion, hold a public hearing. Public notice will be given 30 days before any public hearing. If a Section 401 water quality certification is issued, response to relevant comments will be provided at the time of the certification. For further information, please call Darren Gove at 217/782-3362.

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Channahon Township Highway Department (“Applicant”) has applied for a 401 Water Quality Certification for impacts associated with the encapsulation of approximately 130 linear feet of roadside stream in Section 6, Township 34 North, Range 9 East, in Will County, Illinois. The road safety improvement project site is located on the north side of Canal Road 500 feet east of Rivers Edge Drive and approximately 1/2 miles east of Minooka, Illinois.

The proposed project would eliminate a sheer drop-off that currently exists along the north side of Canal Road at this location. The drop-off is a result of the initial road design that accommodated drainage of the unnamed stream that flows southward under the CSX Railroad embankment immediately to the north of the road. The stream outlets against the road’s concrete retaining wall and then flows eastward between the road and tracks for approximately 130 feet where its flow is directed beneath the road in a concrete box culvert. The modification would be accomplished by installing a length of 96-inch diameter steel culvert pipe and two associated reinforced concrete junction chambers to provide connection between the existing concrete arch culvert under the CSX Railroad tracks and the existing box culvert below Canal Road. The project would encapsulate the entire stream length between Canal Road and the CSX Railroad tracks. The pipe and junction chambers would be backfilled to an acceptable contour to convey roadside drainage. The Applicant would employ flow bypass to convey the stream’s base flow around the project site to facilitate construction in dry conditions. Following installation of the pipe and other drainage components, the area surrounding the pipe would be backfilled, graded and stabilized consistent with typical roadside drainage features. The project would cause permanent fill impacts to 0.021 acres of the stream, which is identified as an unnamed tributary of the DuPage River.

Information used in this review was obtained from the “Application for Section 404 Permit Authorization” that was received November 21, 2016 and additional information received on February 15, 2017 and May 17, 2017.

Identification and Characterization of the Affected Water Body

The stream to be permanently impacted by the proposed activities is an unnamed tributary (no segment ID code) of the Du Page River (IL_GB-01). The unnamed tributary is classified as a General Use water body and contains 0 cfs of flow during 7Q10 low flow conditions. Given its small watershed size of 0.37 square miles as reported by the USGS Illinois StreamStats basin characteristics program, the unnamed tributary has not been assessed by the Agency and is not found on the 2016 Illinois Integrated Water Quality Report and Section 303(d) List. The unnamed tributary has not been given an integrity rating or been listed as biologically significant in the 2008 Illinois Department of Natural Resources Publication *Integrating Multiple Taxa in a Biological Stream Rating System*, nor is it listed as an enhanced stream in regards to the dissolved oxygen water quality standard.

Based on information provided by the Applicant, the unnamed tributary is concrete lined or rock bottom throughout the entirety of its length. The north bank consists of a steep railroad embankment with little vegetation except for some scrub trees. The south bank consists of a near vertical roadway retaining wall. According to the Illinois State Water Survey, the unnamed tributary is likely to be a 7Q1.1 zero flow stream given its small watershed size. In this region of Illinois, 7Q1.1 zero flow streams are streams with a watershed area of 1 square miles or less. These streams will exhibit no flow for at least a continuous seven-day period nine out of ten years. Aquatic life communities in these headwater streams are tolerant of the effects of drying. Depending on the rainfall received before biological surveys, either a very limited aquatic life community, or no community at all would be found. Given this flow regime, no additional characterization of the unnamed tributary is required.

Identification of Proposed Pollutant Load Increases or Potential Impacts on Uses

The pollutant load increases that would occur from this project include some possible increases in total suspended solids resulting from work in the unnamed tributary to prepare for the installation of the pipes and junction chambers. Pollutants typically found in roadway runoff would not be increased because the project would not add additional traffic lanes or cause an increase in vehicular traffic through this route. The short term and temporary increase in suspended solids would not adversely impact the existing uses of the unnamed tributary. However, the permanent fill impacts would remove the existing uses of 0.021 acres of the unnamed tributary.

Fate and Effect of Parameters Proposed for Increased Loading

Suspended solids would eventually be incorporated into bed sediments and would continue to move downstream. Temporary and permanent erosion control measures would be implemented to maintain a high quality of storm water runoff from the disturbed areas. A flow bypass system would be utilized to facilitate dry work in the stream, thereby minimizing the increases in suspended solids. The 0.021 acres of permanent fill would remove the existing uses of this small stream segment. However, given the small watershed size of the unnamed tributary, the lack of perennial flow is the primary deterrent in the establishment of aquatic life. The project would retain the connectivity with upstream and downstream reaches and continue to allow for the seasonal, intermittent use of the unnamed tributary by aquatic life.

Purpose and Social & Economic Benefits of the Proposed Activity

The purpose of the proposed road safety improvement project is to provide improved safety for users of this roadway. Hazardous conditions are present due to the deep vertical drop-off adjacent to the road's north side. According to the Applicant, multiple school busses transit this road daily during the school year and the risk to road maintenance crews is considered excessive. The steel guardrail attached to the concrete retaining wall has been repaired on multiple occasions and it is considered a hazard because in the event of an impact it is possible that the guardrail bolts could shear off and/or damage the roadway retaining wall. The guardrail requires regular maintenance and the drop-off is a hazard and impediment for roadside maintenance

crews. The proposed roadway safety improvements would eliminate the risk to the traveling public, maintenance crews and to the roadway retaining wall posed by the 7-foot drop-off and tributary to the north of Canal Road at this site.

Assessments of Alternatives for Less Increase in Loading or Minimal Environmental Degradation

According to the Applicant, there is a need to mitigate or eliminate a 7-foot and greater drop-off from the edge of the road's shoulder to the bottom of the drainage way along the north side of Canal Road. The Applicant considered four alternative plans to mitigate or eliminate the hazard.

The first alternative considered includes providing road signage in advance of the hazard and installation of new guardrails. This option would provide motorists advanced warning of the drop off hazard and a new guardrail to help prevent vehicles from leaving the road. The new guardrail would be more stable but it would still be susceptible to failure in the event of a highspeed crash or impact with a large vehicle such as a school bus. This alternative does not accomplish the purpose of the project to remove the hazard to the motoring public and maintenance personnel.

The second alternative considered includes redesign of the roadway to include a new box culvert oriented at a skewed angle with the roadway. This option would eliminate the need for a guardrail and would accomplish the purpose of the project. However, this alternative would be a costlier version of the preferred option because the tributary would be effectively realigned and encapsulated within new box culvert. This option would require significant roadwork. Because of the substantial cost of this option and the relatively low daily traffic volume the Applicant has determined that this alternative is not considered practicable.

The third alternative considered includes widening the road to provide sufficient clear space to allow errant drivers adequate recovery space. This option would require extending the existing box culvert and therefore impacts to the stream. This option would require extensive roadwork including new retaining wall structures and the associated impacts to the tributary. Because of the substantial cost of this option and the relatively low daily traffic volume the Applicant has determined that this alternative is not considered practicable.

The preferred option is to construct a 96-inch diameter pipe with associated junction chambers to convey the watersheds drainage. This option removes a hazardous 7-foot and greater drop-off at edge of roadway and reduces the maintenance costs associated with repairs to the guardrails. This option also results in reduced sedimentation load to the tributary from the steep unvegetated railroad embankments. This option accomplishes the project's purpose without major disturbance to the roadway and within acceptable budgetary constraints.

The construction of the roadway improvements would follow guidelines set forth by the Agency and the Corps of Engineers. The least intrusive alternative would be to not construct the project. This is not an acceptable alternative given the need to improve safety and mobility for the traveling public by reducing the risk of vehicles leaving the road and entering the drop-off.

Summary Comments of the Illinois Department of Natural Resources, Regional Planning Commissions, Zoning Boards or Other Entities

The Natural Resources Review Memorandum, dated December 9, 2016 indicated that the Illinois Natural Heritage Database contains no record of State-listed threatened or endangered species, Illinois Natural Area Inventory sites, dedicated Illinois Nature Preserves, or registered Land and Water Reserves in the vicinity of the project location. Consultation for Endangered Species protection and Natural Areas Preservation (Part 1075) was terminated.

Agency Conclusion

This preliminary assessment was conducted pursuant to the Illinois Pollution Control Board regulation for Antidegradation found at 35 Ill. Adm. Code 302.105 (antidegradation standard) and was based on the information available to the Agency at the time the draft 401 Water Quality Certification was written. We tentatively find that the proposed activity will result in the attainment of water quality standards; that all technically and economically reasonable measures to avoid or minimize the extent of the proposed increase in pollutant loading have been incorporated into the proposed activity. The proposed roadway safety improvements would eliminate the risk to the traveling public, maintenance crews and to the roadway retaining wall posed by the 7-foot drop-off and tributary to the north of Canal Road at this site. Comments received during the 401 Water Quality Certification public notice period will be evaluated before a final decision is made by the Agency.